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(FILE 'HOME' ENTERED AT 13:15:57 ON 21 APR 2006)

FILE 'HCAPLUS' ENTERED AT 13:16:07 ON 21 APR 2006

E US2004-816095/APPS

L1 1 SEA ABB=ON PLU=ON US2004-816095/AP
SEL RN

FILE 'REGISTRY' ENTERED AT 13:16:21 ON 21 APR 2006

FILE 'HCAPLUS' ENTERED AT 13:16:29 ON 21 APR 2006

D IALL HITSTR

FILE 'REGISTRY' ENTERED AT 13:16:54 ON 21 APR 2006

L2 38 SEA ABB=ON PLU=ON (106-65-0/BI OR 112-30-1/BI OR 115-29-7/BI
OR 12172-85-9/BI OR 12173-60-3/BI OR 12174-06-0/BI OR 12174-11-
7/BI OR 12424-32-7/BI OR 1318-00-9/BI OR 1318-93-0/BI OR
1319-41-1/BI OR 14002-34-7/BI OR 141-28-6/BI OR 1582-09-8/BI
OR 25038-54-4/BI OR 25038-59-9/BI OR 25311-71-1/BI OR 25610-17-
7/BI OR 26023-30-3/BI OR 26063-00-3/BI OR 26100-51-6/BI OR
26744-04-7/BI OR 32131-17-2/BI OR 402944-35-8/BI OR 402944-43-8
/BI OR 424829-07-2/BI OR 4536-23-6/BI OR 511244-55-6/BI OR
51630-58-1/BI OR 52315-07-8/BI OR 52645-53-1/BI OR 64735-07-5/B
I OR 793694-36-7/BI OR 82657-04-3/BI OR 9002-88-4/BI OR
9003-07-0/BI OR 9003-29-6/BI OR 9022-20-2/BI)

FILE 'HCAPLUS' ENTERED AT 13:17:01 ON 21 APR 2006

L3 1 SEA ABB=ON PLU=ON L1 AND L2
D IALL HITSTR

FILE 'REGISTRY' ENTERED AT 13:18:03 ON 21 APR 2006

FILE 'HCAPLUS' ENTERED AT 14:16:47 ON 21 APR 2006

E NANOCCLAY/CT

E CLAY/CT

E CLAYS/CT

E E3+ALL

L4 2877 SEA ABB=ON PLU=ON CLAYS+PFT,NT/CT(L) (NANO? OR COLLOID?)

L5 9693 SEA ABB=ON PLU=ON L4 OR NANOCCLAY? OR NANO? (3A)?CLAY? OR
COLLOID? (3A)?CLAY? OR PHYLLO? (S)?SILICA?
E SUSTAINED RELEAS/CT

E E13+ALL

E SUSTAINED RELEAS/CT

L6 1691 SEA ABB=ON PLU=ON L5 AND INTERCAL?

E PESTICIDES/CT

L7 272882 SEA ABB=ON PLU=ON PESTICIDES+PFT,NT/CT

E INSECTICIDES/CT

L8 85804 SEA ABB=ON PLU=ON INSECTICIDES+PFT,NT/CT

E PYRETHRINS/CT

L9 19377 SEA ABB=ON PLU=ON PYRETHRINS+PFT,NT/CT

E PESTICIDE FORMULATIONS/CT

E E3+ALL

L10 2623 SEA ABB=ON PLU=ON PESTICIDE FORMULATIONS+PFT,NT/CT

L11 6432 SEA ABB=ON PLU=ON ANT

L12 395128 SEA ABB=ON PLU=ON (L7 OR L8 OR L9 OR L10 OR L11) OR PESTICID?
OR INSECT? OR PYRETHRIN?

L13 1701 SEA ABB=ON PLU=ON L5 AND (INTERCAL? OR RECALCITR? OR
SUSTAINED RELEAS?)

L14 8 SEA ABB=ON PLU=ON L13 AND L12
 L*** DEL 1 S L1 AND L14

FILE 'REGISTRY' ENTERED AT 14:26:49 ON 21 APR 2006

L*** DEL 1 S POLYETHYLENE/CN
 L15 13 SEA ABB=ON PLU=ON L2 AND PMS/CI

FILE 'HCAPLUS' ENTERED AT 14:27:41 ON 21 APR 2006

L16 169192 SEA ABB=ON PLU=ON POLYMERS+PFT/CT
 E ACRYLIC POLYMERS/CT
 L17 55879 SEA ABB=ON PLU=ON ACRYLIC POLYMERS+PFT/CT
 L18 150833 SEA ABB=ON PLU=ON EPOXY RESINS+PFT,NT1/CT
 L19 176977 SEA ABB=ON PLU=ON POLYAMIDES+PFT,NT1/CT
 L20 55500 SEA ABB=ON PLU=ON POLYCARBONATES+PFT,NT1/CT
 E NATURAL RUBBER/CT
 L21 15623 SEA ABB=ON PLU=ON NATURAL RUBBER+PFT,NT/CT
 L22 125973 SEA ABB=ON PLU=ON POLYURETHANES+PFT/CT
 L23 377180 SEA ABB=ON PLU=ON POLYESTERS+PFT,NT1/CT
 L24 994953 SEA ABB=ON PLU=ON (L15 OR L16 OR L17 OR L18 OR L19 OR L20 OR
 L21 OR L22 OR L23)
 L25 2150 SEA ABB=ON PLU=ON L5 AND L24
 L26 65144 SEA ABB=ON PLU=ON INTERCAL? OR RECALCITR? OR SUSTAINED
 RELEAS?
 L27 730 SEA ABB=ON PLU=ON L25 AND (L26 OR L12)
 L28 5 SEA ABB=ON PLU=ON L25 AND L26 AND L12

FILE 'REGISTRY' ENTERED AT 14:31:24 ON 21 APR 2006

E BIFENTRIN/CN
 E BIFENTHRIN/CN
 L29 1 SEA ABB=ON PLU=ON BIFENTHRIN/CN
 SEL RN
 L30 83 SEA ABB=ON PLU=ON 82657-04-3/CRN OR L29

FILE 'HCAPLUS' ENTERED AT 14:32:26 ON 21 APR 2006

L31 1 SEA ABB=ON PLU=ON L27 AND L30

FILE 'REGISTRY' ENTERED AT 14:32:47 ON 21 APR 2006

E MONTMORILLONITE/CN
 L32 1 SEA ABB=ON PLU=ON MONTMORILLONITE/CN
 SEL RN
 L33 89 SEA ABB=ON PLU=ON 1318-93-0/CRN OR L32

FILE 'HCAPLUS' ENTERED AT 14:33:08 ON 21 APR 2006

L34 1 SEA ABB=ON PLU=ON L5 AND (L30 OR BIFENTHRIN?)
 L35 2997 SEA ABB=ON PLU=ON L5 AND (L33 OR MONTMORILLONIT?)
 L36 535 SEA ABB=ON PLU=ON L27 AND (L33 OR MONTMORILLONIT?)
 L37 50 SEA ABB=ON PLU=ON L36 AND (L12 OR BARRIER?)
 L38 7 SEA ABB=ON PLU=ON L36 AND (L12 OR PEST? OR INSECT?)
 L39 381 SEA ABB=ON PLU=ON L5 AND ?RELEAS?
 L40 10 SEA ABB=ON PLU=ON L39 AND (L12 OR PEST? OR INSECT?)
 L41 23852 SEA ABB=ON PLU=ON L14 OR L31 OR L32 OR L34 OR L38 OR L40
 L42 18 SEA ABB=ON PLU=ON L14 OR L28 OR L31 OR L34 OR L38 OR L40

INDEX '1MOBILITY, 2MOBILITY, ABI-INFORM, ADISCTI, AEROSPACE, AGRICOLA,
 ALUMINIUM, ANABSTR, ANTE, APOLLIT, AQUALINE, AQUASCI, AQUIRE, BABS,
 BIBLIODATA, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, BLLDB,
 CABA, CAOLD, CAPLUS, CASREACT, CBNB, CEABA-VTB, ...' ENTERED AT 14:43:46
 ON 21 APR 2006

SEA (COLLOID?(2A)CLAY? OR NANOCCLAY? OR NANO?(2A)CLAY? OR PHYLLO

0* FILE APOLLIT

INDEX '1MOBILITY, 2MOBILITY, ABI-INFORM, ADISCTI, AEROSPACE, AGRICOLA,
ALUMINIUM, ANABSTR, ANTE, APOLLIT, AQUALINE, AQUASCI, AQUIRE, BABS,
BIBLIODATA, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, BLLDB,
CABA, CAOLD, CAPLUS, CASREACT, CBNB, CEABA-VTB, ...' ENTERED AT 14:51:30
ON 21 APR 2006

SEA (COLLOID?(2A)CLAY? OR NANOCLAY? OR NANO?(2A)CLAY? OR PHYLLO

0* FILE APOLLIT

SEA (COLLOID?(2A)CLAY? OR NANOCLAY? OR NANO?(2A)CLAY? OR PHYLLO

0* FILE APOLLIT

INDEX '1MOBILITY, 2MOBILITY, ABI-INFORM, ADISCTI, AEROSPACE, AGRICOLA,
ALUMINIUM, ANABSTR, ANTE, APOLLIT, AQUALINE, AQUASCI, AQUIRE, BABS,
BIBLIODATA, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, BLLDB,
CABA, CAOLD, CAPLUS, CASREACT, CBNB, CEABA-VTB, ...' ENTERED AT 14:54:52
ON 21 APR 2006

SEA (COLLOID?(2A)CLAY? OR NANOCLAY? OR NANO?(2A)CLAY? OR PHYLLO

6 FILE 1MOBILITY
42 FILE ABI-INFORM
287 FILE AEROSPACE
126 FILE AGRICOLA
6 FILE ALUMINIUM
24 FILE ANABSTR
172 FILE ANTE
976 FILE APOLLIT
44 FILE AQUALINE
112 FILE AQUASCI
141 FILE BABS
33 FILE BIBLIODATA
25 FILE BIOENG
422 FILE BIOSIS
19 FILE BIOTECHABS

SEA (COLLOID?(2A)CLAY? OR NANOCLAY? OR NANO?(2A)CLAY? OR PHYLLO

1 FILE ABI-INFORM
3 FILE AGRICOLA
1 FILE ANABSTR
3 FILE AQUALINE
10 FILE BIOSIS
1 FILE BIOTECHABS
1 FILE BIOTECHDS
17 FILE CABA
1 FILE CAOLD
43 FILE CAPLUS
1 FILE CBNB
1 FILE CEABA-VTB
1 FILE CIVILENG
4 FILE COMPENDEX
6 FILE CROPB
3 FILE CROPU
5 FILE EMBASE
2 FILE ENCOMPLIT
19 FILE ENCOMPPAT
1 FILE ENERGY

2 FILE ENVIROENG
 275 FILE EPFULL
 3 FILE ESBIOWASE
 9 FILE FRFULL
 1 FILE FROSTI
 8 FILE GBFULL
 4 FILE GEOREF
 15 FILE IFIPAT
 2 FILE INPADOC
 2 FILE JAPIO
 37 FILE JICST-EPLUS
 1 FILE MATBUS
 2 FILE MEDLINE
 1 FILE NLDB
 54 FILE PASCAL
 331 FILE PATDPAFULL
 484 FILE PCTFULL
 2 FILE PIRA
 2 FILE POLLUAB
 19 FILE PROMT
 9 FILE SCISEARCH
 14 FILE TOXCENTER
 961 FILE USPATFULL
 125 FILE USPAT2
 1 FILE VETU
 5 FILE WATER
 11 FILE WPIDS
 11 FILE WPINDEX
 1 FILE WSCA

L43 QUE ABB=ON PLU=ON (COLLOID?(2A) CLAY? OR NANOCILAY? OR
 NANO?(2A) CLAY? OR PHYLLOSIL? OR PHYLLO?(2A) SILICA?) AND
 (PEST? OR INSECT?)

FILE 'USPATFULL, PCTFULL, PATDPAFULL, EPFULL, USPAT2, PASCAL, CAPLUS,
 JICST-EPLUS, ENCOMPAT, PROMT, CABA, IFIPAT, TOXCENTER, WPIDS, BIOSIS,
 FRFULL, SCISEARCH, GBFULL, CROPB, EMBASE, WATER, COMPENDEX, GEOREF,
 AGRICOLA, AQUALINE, CROPU, ESBIOWASE, ENCOMPLIT, ...' ENTERED AT 14:58:46
 ON 21 APR 2006

L44 2504 SEA ABB=ON PLU=ON L43
 L45 233 SEA ABB=ON PLU=ON L44 AND (INTERCAL? OR (SUSTAIN? OR
 EXTEND?)(3A) RELEAS? OR RECALCITRA?)
 L46 206 SEA ABB=ON PLU=ON L45 AND POLYMER?
 L47 116 SEA ABB=ON PLU=ON L46 AND (ONIUM? OR AMMONIUM OR OCTADECYLAMI
 N? OR OCTA DECYL AMIN? OR OCTADECYL AMIN?)
 D KWIC
 D KWIC 10
 L48 66 SEA ABB=ON PLU=ON L47 AND INTERCAL?
 L49 59 DUP REM L48 (7 DUPLICATES REMOVED)
 ANSWERS '1-36' FROM FILE USPATFULL
 ANSWERS '37-44' FROM FILE PCTFULL
 ANSWERS '45-46' FROM FILE PATDPAFULL
 ANSWERS '47-53' FROM FILE EPFULL
 ANSWERS '54-57' FROM FILE PROMT
 ANSWERS '58-59' FROM FILE FRFULL
 L50 33 SEA ABB=ON PLU=ON L49 AND (POLYURETHAN? OR BIFENTHR? OR
 MONTMORIL?)
 D KWIC
 D SCA TI

FILE 'HCAPLUS, USPATFULL, PCTFULL, PATDPAFULL, EPFULL, PROMT' ENTERED AT
15:14:50 ON 21 APR 2006

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L51      48 DUP REM L42 L50 (3 DUPLICATES REMOVED)
        ANSWERS '1-18' FROM FILE HCAPLUS
        ANSWERS '19-37' FROM FILE USPATFULL
        ANSWERS '38-41' FROM FILE PCTFULL
        ANSWERS '42-43' FROM FILE PATDPAFULL
        ANSWER '44' FROM FILE EPFULL
        ANSWERS '45-48' FROM FILE PROMT

=> d que stat l51
L2      38 SEA FILE=REGISTRY ABB=ON PLU=ON (106-65-0/BI OR 112-30-1/BI
        OR 115-29-7/BI OR 12172-85-9/BI OR 12173-60-3/BI OR 12174-06-0/
        BI OR 12174-11-7/BI OR 12424-32-7/BI OR 1318-00-9/BI OR
        1318-93-0/BI OR 1319-41-1/BI OR 14002-34-7/BI OR 141-28-6/BI
        OR 1582-09-8/BI OR 25038-54-4/BI OR 25038-59-9/BI OR 25311-71-1
        /BI OR 25610-17-7/BI OR 26023-30-3/BI OR 26063-00-3/BI OR
        26100-51-6/BI OR 26744-04-7/BI OR 32131-17-2/BI OR 402944-35-8/
        BI OR 402944-43-8/BI OR 424829-07-2/BI OR 4536-23-6/BI OR
        511244-55-6/BI OR 51630-58-1/BI OR 52315-07-8/BI OR 52645-53-1/
        BI OR 64735-07-5/BI OR 793694-36-7/BI OR 82657-04-3/BI OR
        9002-88-4/BI OR 9003-07-0/BI OR 9003-29-6/BI OR 9022-20-2/BI)
L4      2877 SEA FILE=HCAPLUS ABB=ON PLU=ON CLAYS+PFT,NT/CT(L) (NANO? OR
        COLLOID?)
L5      9693 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR NANOCCLAY? OR NANO?(3A)?C
        LAY? OR COLLOID?(3A)?CLAY? OR PHYLLO?(S)?SILICA?
L7      272882 SEA FILE=HCAPLUS ABB=ON PLU=ON PESTICIDES+PFT,NT/CT
L8      85804 SEA FILE=HCAPLUS ABB=ON PLU=ON INSECTICIDES+PFT,NT/CT
L9      19377 SEA FILE=HCAPLUS ABB=ON PLU=ON PYRETHRINS+PFT,NT/CT
L10     2623 SEA FILE=HCAPLUS ABB=ON PLU=ON PESTICIDE FORMULATIONS+PFT,NT/
        CT
L11     6432 SEA FILE=HCAPLUS ABB=ON PLU=ON ANT
L12     395128 SEA FILE=HCAPLUS ABB=ON PLU=ON (L7 OR L8 OR L9 OR L10 OR
        L11) OR PESTICID? OR INSECT? OR PYRETHRIN?
L13     1701 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 AND (INTERCAL? OR RECALCITR
        ? OR SUSTAINED RELEAS?)
L14     8 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 AND L12
L15     13 SEA FILE=REGISTRY ABB=ON PLU=ON L2 AND PMS/CI
L16     169192 SEA FILE=HCAPLUS ABB=ON PLU=ON POLYMERS+PFT/CT
L17     55879 SEA FILE=HCAPLUS ABB=ON PLU=ON ACRYLIC POLYMERS+PFT/CT
L18     150833 SEA FILE=HCAPLUS ABB=ON PLU=ON EPOXY RESINS+PFT,NT1/CT
L19     176977 SEA FILE=HCAPLUS ABB=ON PLU=ON POLYAMIDES+PFT,NT1/CT
L20     55500 SEA FILE=HCAPLUS ABB=ON PLU=ON POLYCARBONATES+PFT,NT1/CT
L21     15623 SEA FILE=HCAPLUS ABB=ON PLU=ON NATURAL RUBBER+PFT,NT/CT
L22     125973 SEA FILE=HCAPLUS ABB=ON PLU=ON POLYURETHANES+PFT/CT
L23     377180 SEA FILE=HCAPLUS ABB=ON PLU=ON POLYESTERS+PFT,NT1/CT
L24     994953 SEA FILE=HCAPLUS ABB=ON PLU=ON (L15 OR L16 OR L17 OR L18 OR
        L19 OR L20 OR L21 OR L22 OR L23)
L25     2150 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 AND L24
L26     65144 SEA FILE=HCAPLUS ABB=ON PLU=ON INTERCAL? OR RECALCITR? OR
        SUSTAINED RELEAS?
L27     730 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 AND (L26 OR L12)
L28     5 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 AND L26 AND L12
L29     1 SEA FILE=REGISTRY ABB=ON PLU=ON BIFENTHRIN/CN
L30     83 SEA FILE=REGISTRY ABB=ON PLU=ON 82657-04-3/CRN OR L29
L31     1 SEA FILE=HCAPLUS ABB=ON PLU=ON L27 AND L30
L32     1 SEA FILE=REGISTRY ABB=ON PLU=ON MONTMORILLONITE/CN
L33     89 SEA FILE=REGISTRY ABB=ON PLU=ON 1318-93-0/CRN OR L32

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L34 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 AND (L30 OR BIFENTHRIN?)
 L36 535 SEA FILE=HCAPLUS ABB=ON PLU=ON L27 AND (L33 OR MONTMORILLONIT
 ?)
 L38 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND (L12 OR PEST? OR
 INSECT?)
 L39 381 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 AND ?RELEAS?
 L40 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 AND (L12 OR PEST? OR
 INSECT?)
 L42 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 OR L28 OR L31 OR L34 OR
 L38 OR L40
 L43 QUE ABB=ON PLU=ON (COLLOID?(2A) CLAY? OR NANOCCLAY? OR
 NANO?(2A) CLAY? OR PHYLLOSIL? OR PHYLLO?(2A) SILICA?) AND
 (PEST? OR INSECT?)
 L44 2504 SEA L43
 L45 233 SEA L44 AND (INTERCAL? OR (SUSTAIN? OR EXTEND?)(3A) RELEAS? OR
 RECALCITRA?)
 L46 206 SEA L45 AND POLYMER?
 L47 116 SEA L46 AND (ONIUM? OR AMMONIUM OR OCTADECYLAMIN? OR OCTA
 DECYL AMIN? OR OCTADECYL AMIN?)
 L48 66 SEA L47 AND INTERCAL?
 L49 59 DUP REM L48 (7 DUPLICATES REMOVED)
 L50 33 SEA L49 AND (POLYURETHAN? OR BIFENTHR? OR MONTMORIL?)
 L51 48 DUP REM L42 L50 (3 DUPLICATES REMOVED)

=> d l51 ibib abs hitind hitstr 1-18;d ibib abs 19-48

L51 ANSWER 1 OF 48 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
 ACCESSION NUMBER: 2004:1019297 HCAPLUS
 DOCUMENT NUMBER: 141:407254
 TITLE: Use of colloidal clays for
 sustained release of
 pesticides and similar active ingredients
 INVENTOR(S): Cataldo, Dominic A.; Lipinsky, Edward S.; Van Voris,
 Peter
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 11 pp., Cont.-in-part of U.S.
 Ser. No. 325,327.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004231231	A1	20041125	US 2004-816095	20040401
PRIORITY APPLN. INFO.:			US 2002-325327	A2 20021220
			US 2004-543184P	P 20040210

AB One aspect of the invention is a method of controlling target living
 species with an active ingredient over an extended period of time. The
 active ingredient is sorbed into colloidal clay.
 Next, a polymer pellet recalcitrant to release of the
 active ingredient is loaded with the sorbed colloidal
 clay. Finally, the loaded polymer pellet is formed into a
 barrier, which is adapted to be placed at a location for controlling a
 target living species. Another aspect is a barrier for controlling a
 target living species. The formed barrier contains polymer pellets loaded
 with colloidal clay sorbed with an active ingredient